

UROSKOP D

SP

Service Information

Replacing the patient tabletop

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English

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Safety information

CAUTION

- When performing service work and tests, observe the product-specific safety information contained in this document as well as the general safety information in Register 2 of the TI folder / ARTD part 2.

Observe all C-MOS guidelines.

Tolerance specifications

General tolerances for the lengths of screws according to ISO 2768

Ranges of length	from 3 mm to 6 mm	from 6 mm to 30 mm	from 30 mm to 120 mm	from 120 mm to 400 mm	from 400 mm to 1000 mm	from 1000 mm to 2000 mm	from 2000 mm to 4000 mm
permitted tolerance	$\pm 0.5 \text{ mm}$	$\pm 1 \text{ mm}$	$\pm 1.5 \text{ mm}$	$\pm 2.5 \text{ mm}$	$\pm 4 \text{ mm}$	$\pm 6 \text{ mm}$	$\pm 8 \text{ mm}$

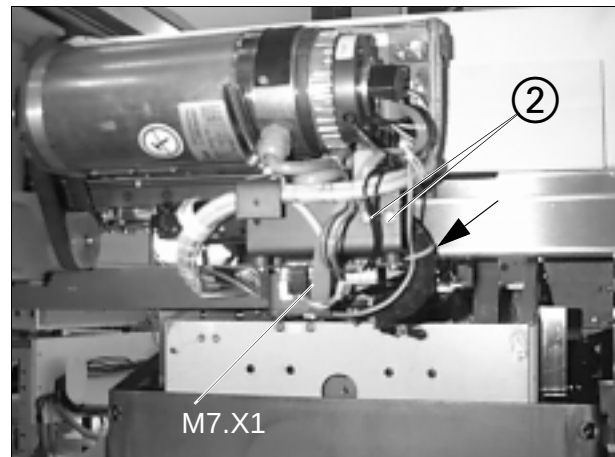
These tolerances apply to all lengths specified in this document, provided a different value is not expressly indicated.

A tolerance of $\pm 10\%$ is permitted for the torques indicated.

Replacing damaged or lost screws

Damaged or lost screws may be replaced only with steel screws as indicated in the drawings according to DIN 267 and having the tensile strength specified.

All Allen screws used must have a tensile strength of 8.8, unless otherwise specified in this document.



Materials and tools required

- 2 adjustment pins, item no. 35 11 375 for gears
- 5mm drill bit and drill
- service tool kit
- 2 Nm torque wrench, item no. 34 300 63

CAUTION

- 3 service engineers will be required for a short period of time
- store all removed parts for later use

Procedure

- Remove the covers from the transverse carriage (patient table).
- Move the table headward until the caps (7/Fig.5) covering the chain tensioning screws on the longitudinal table drive can be removed.
To facilitate this procedure, remove the 2 Allen screws 4 x 12 mm from either side (Fig.7).
- Disconnect connector M7.X1 (Fig.2).
- Remove the 2 Allen screws, 4 x 12 mm (2/Fig.2) from connector terminal M7.
To facilitate this procedure remove the cable ties from the cable harness as needed.
- Remove the 4 Allen screws $\varnothing$ 5 mm (3/Fig.3) and then pull the foot-end toothed rail (4/ Fig.3) out of the guide on the transverse carriage, i.e. toward the tube support arm.
- Back off the attachment screw (5/Fig.4) for the connector terminal holder slightly, to avoid damaging switches S60, S61 and S62 when subsequently removing the head-end toothed rail.
- Remove the 4 hexagonal screws $\varnothing$ 5 mm (6/Fig.4). Then unscrew the head-end toothed rail concealed behind the drive and in the guide for the transverse carriage. Pull it out toward the tube support arm.
- Push the transverse carriage toward the tube column manually.
- Remove the countersunk screws 4 x 8 mm and washers (8/Fig.6).
- Insert and tighten the attachment screw 4 x 20 mm (1/Fig.1) for the cover bracket in the corresponding threaded hole to prevent the ball bearing race from falling out.
The screw will have to be removed again when the procedure is completed and before the cover is installed again.

CAUTION

On some older systems, it will not be possible to insert the attachment screw as described because the corresponding threaded hole is missing. In this case, particular care must be taken when installing the patient table.



Fig. 7

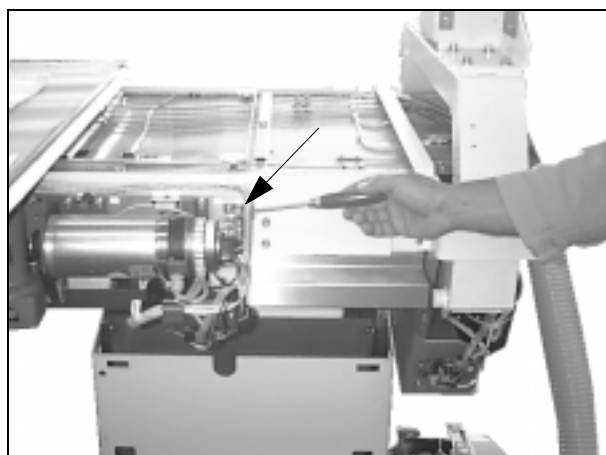


Fig. 8

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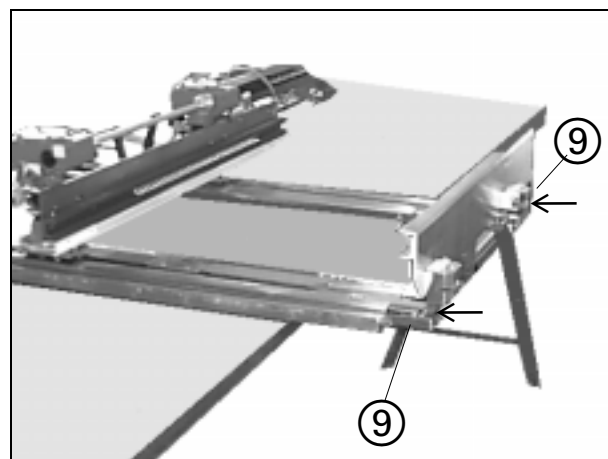


Fig. 9

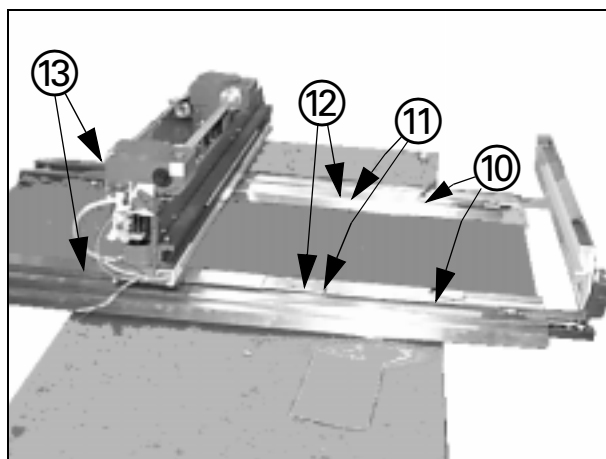


Fig. 10

- Two service engineers should pull the transverse carriage forward (Fig.7) while a third service engineer pushes down on the ball bearing race in the transverse carriage guide using a long screwdriver or a bar and then pushes it outward, together with the transverse carriage. (Fig.7 and Fig.8))

Notice

The ball bearings could fall out if the ball bearing race is not pushed out together with the transverse carriage.

- Place the transverse carriage on the tabletop (lower portion facing upward, Fig.9)
- Remove the Allen set screws (9/Fig.9) from both sides.
- Release the chain tension via the Allen screw 8 x 40 mm (y/Fig. 9).
- Remove the two brackets (10/Fig.10) by first removing the set screws with washers.
- Remove the eight Allen countersunk screws and the four black set screws from both sides (11...13/Fig.10).

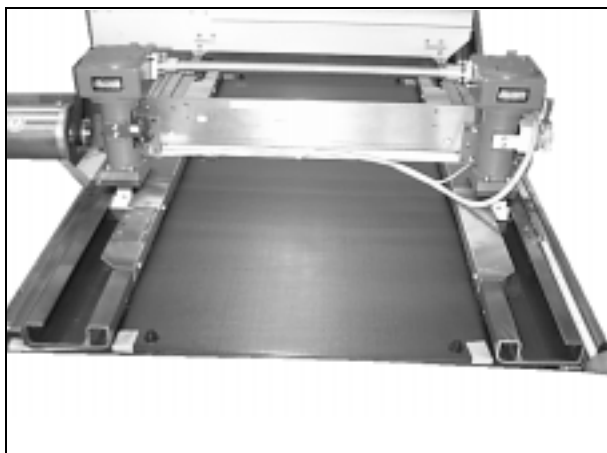


Fig. 11

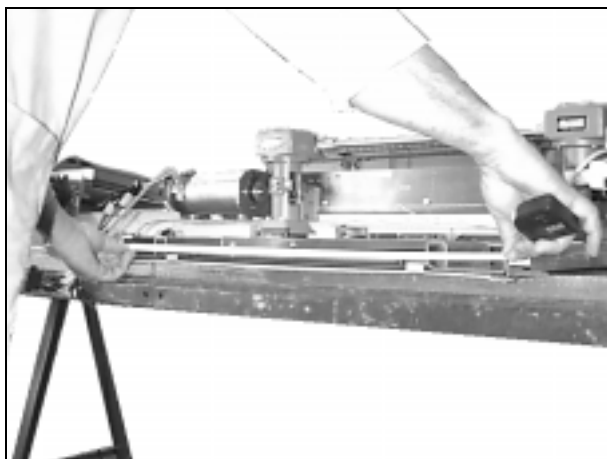


Fig. 12

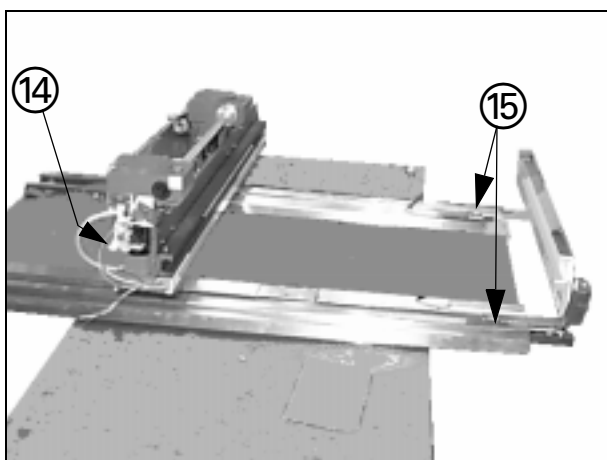


Fig. 13

- Push the transverse carriage out of the patient table (tabletop).

Notice:

To install the items, simply reverse the removal procedure.

- Prepare the new tabletop and insert the transverse carriage (Fig.11).
- If the transverse carriage does not fit in the patient tabletop exactly, due to slight differences in dimensions, adjustments must be made. This is common with older systems.
- Compare the standard width of the new tabletop (682 mm) with the width of the old tabletop by measuring from the inner edge of the left guide to the inner edge of the right guide of the patient tabletop (Fig.12).
- Remove the gears to perform the adjustment.
- Loosen the four screws 6 x 16 mm (14/ Fig.13) and remove the adjustment pins.
- Loosen the rollers facing the gear by removing the three 6 mm Allen screws (15/Fig.13).
- Adjust the gear and the rollers until the transverse carriage fits properly.
- Tighten the screws for the gear and rollers.
- Re-insert the adjustment pins in the gear (Fig.13).

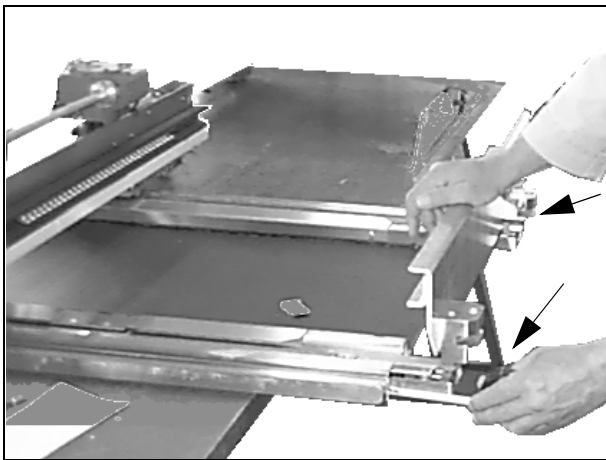


Fig. 14

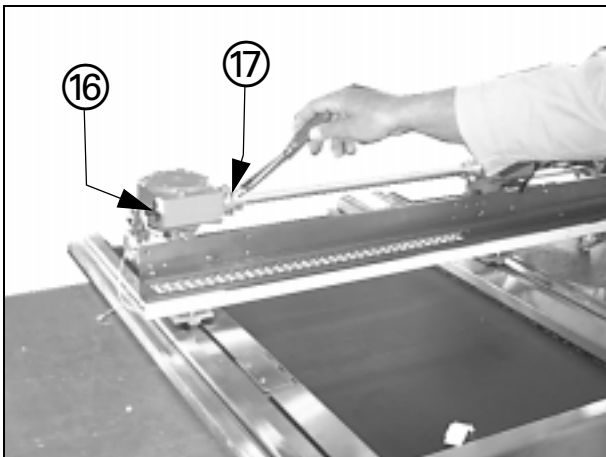


Fig. 15

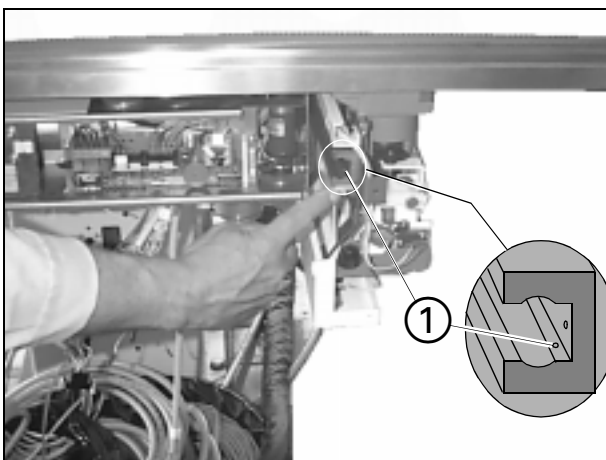


Fig. 16

- Measure the distances to the guides on either side to ensure that the transverse carriage is not tilted (y/Fig.14). The measurements should be equal.
- Use the gear to make any adjustments necessary.
To do so, remove the drive from the clutch by removing the two Allen set screws (Fig.15).
- Move the gear toward the clutch using the shaft that protrudes slightly from the gear (16/Fig.15) until the tilt is corrected.
- Measure the distances to both guides again.
- If the distances are the same, secure the clutch (17/Fig.15) to the gear using the two set screws.
- Install all remaining parts by reversing the removal procedure.
- Set the chain tension to 2 Nm.
- Attach the caps again.
- After all of the parts have been installed again and the screws have been tightened, install the patient table on the supports.
Install it by reversing the removal procedure.
- Before installing the covers, remove the attachment screw 4 x 20 mm (1/Fig.16) used earlier to secure the ball bearing race.
- Test the system functions after all connections have been established and all parts have been installed.

TD SP 2 / Sauter
TD SP 1 / Schlee
SMS Iselin / Weiss Costa